

# Work Order ID 48554

June 30, 2009 7:24:58 AM



Page 1

Item ID: D3564-13 **GY**

Accept



Setup Start



Revision ID: D

Stop



Item Name: Wearshoe

Start Date: 7/15/09 Start Qty: 12.00



Cust Item ID:

Required Date: 8/03/09 Req'd Qty: 12.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3564

Rev D

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3564  
Deburr if necessary

Dwg Rev: D

Prog Rev: D

2-

B9-6-20

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

B9-6-20

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

2006.30 (13)

(13)

**Work Order ID 48554**

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Page 2

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Start Date: 7/15/09 Start Qty: 12.00



Cust Item ID:

Required Date: 8/03/09 Req'd Qty: 12.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

0.00



NC BRAKE

Brake NC

Memo

0.00

Brake NC

Deburr if necessary! Form on Brake as per Dwg D3564 using Jigs DT 8179

SB 09/06/20

140

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

150

0.00



Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

Powdercoat

Memo

0.00

Powder Coating

START TIME:

10:10 AM

OVEN TEMPERATURE:

10:40 AM FINISH TIME:

320°F

JH

09-07-01 (X13)

# Work Order ID 48554

June 30, 2009 7:24:58 AM



Page 3

Item ID: D3564-13

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Setup Start



Revision ID: D

Item Name: Wearshoe

Stop



Start Date: 7/15/09 Start Qty: 12.00



Cust Item ID:

Required Date: 8/03/09 Req'd Qty: 12.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160

QC3- Inspect Part Finish

0.00



QC

Memo

09-07-01 0.00 (13)

Quality Control

170

Identify as per dwg & Stock Location: FP-17

0.00



Packaging

Memo

0.00

Packaging

09-07-01 (X13)

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09/07/07

09-07-01

# Picklist Print

June 30, 2009 7:24:58 AM

Work Order ID: 48554

Parent Item: D3564-13RevD

Parent Item Name: Wearshoe



Comments:

Start Date: 7/15/09

Required Date: 8/03/09

Start Qty: 12.00

Required Qty: 12.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M304S16GA 		Purchased	No			100	sf	158.0110	2.8042			
304/316 Sheet .063					W 111924 063	B 9-6-30						

Date: Friday, 12/06/2009 9:57:46 AM  
 User: Julie Dawson

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : WEARSHOE  
 Job Number : 48554  
 Estimate Number : 12788  
 P.O. Number :  
 This Issue : 12/06/2009 S.O. No. :  
 Prsht Rev. : NC Part Number : D356413  
 First Issue : / / Type : SMALL /MED FAB Drawing Number : D3564 REVD  
 Previous Run : 47867 Project Number : N/A  
 Material :  
 Due Date : 23/06/2009 Qty: 12 Um: Each  
 Written By :  
 Checked & Approved By : Julie Dawson  
 Comment : Est Rev:A New Issue 07-03-08 ec  
 Est Rev:B As per Rev C 07-07-09 JLM  
 Est Rev:C As per Rev D 07-09-09 JLM Verified By:EC  
 Est Rev:D Comments revised on Step 5, 6 per B44657  
 09-02-04 KJ Verified By:EC

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 M304S16GA 304/316 Sheet .063



Comment: Qty.: 0.2331 sf(s)/Unit Total : 2.7972 sf(s)

M304S16GA Stainless steel sheet 0.063" thick

Batch: 111924 1B 9-6-30

2.0 WATER JET FLOW WATER JET



Comment: FLOW WATER JET

1-Cut as per Dwg D3564

Dwg Rev: D

Prog Rev: D

1B 9-6-30

2-Deburr if necessary

1B 9-6-30

3.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0 QC8 SECOND CHECK



Comment: SECOND CHECK

1B 9-6-30 (13)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Friday, 12/06/2009 9:57:46 AM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARSHOE

Job Number: 48554

Part Number: D356413

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

Deburr if necessary

Form on Brake as per Dwg D3564 using Jigs DT 8179

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

START TIME: \_\_\_\_\_

OVEN TEMPERATURE: \_\_\_\_\_

FINISH TIME: \_\_\_\_\_

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

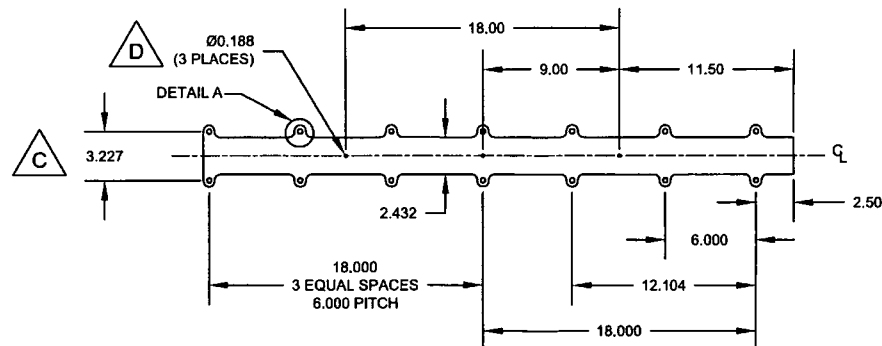
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



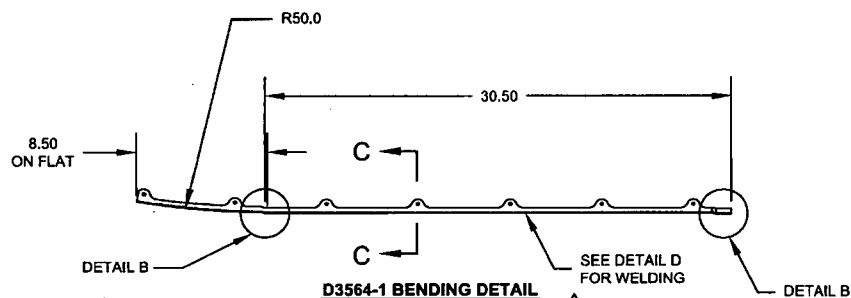




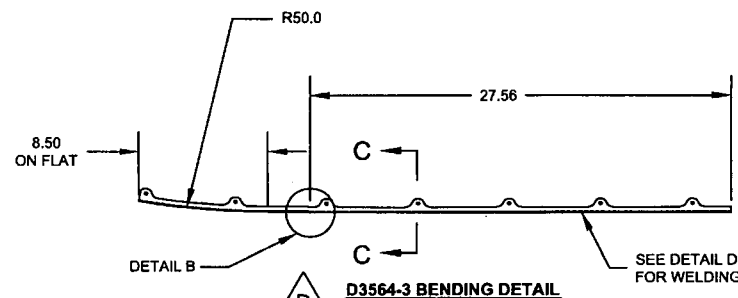
**D3564-1F FLAT PATTERN**

**RELEASED**

07.09.04



**D3564-1 BENDING DETAIL**  
(MAKE FROM D3564-1F)



**D3564-3 BENDING DETAIL**  
(MAKE FROM D3564-1F)

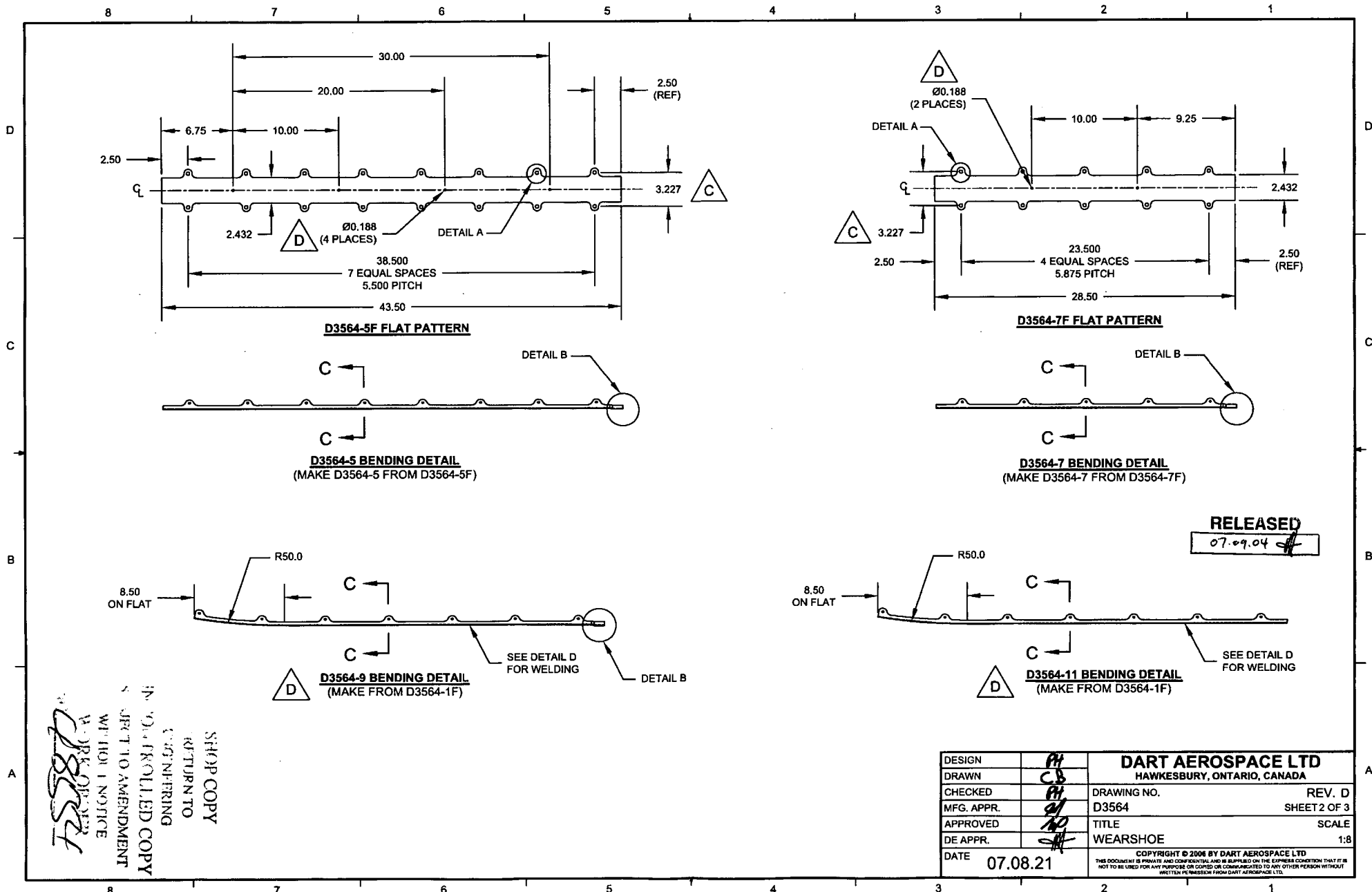
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE

**D3564-1/3/5/7/9/11/13/15 WEARPLATE NOTES:**

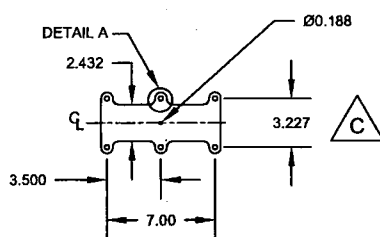
- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 16 GAUGE (0.063 THICK)  
(REF DART MATERIAL SPEC M304S16GA)
- 2) FINISH: POWDER COAT GREY SANDEX (REF 4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: SEE TABLE IN ZONE A3
- 8) WELD PER DART QSI 004
- 9) SEE PG 3 FOR SECTIONS AND DETAILS
- 10) PARTS ARE SYMMETRIC ABOUT C

WEIGHTS:	
D3564-1	1.85 lbs
D3564-3	1.85 lbs
D3564-5	1.93 lbs
D3564-7	1.26 lbs
D3564-9	1.85 lbs
D3564-11	1.85 lbs
D3564-13	0.38 lbs
D3564-15	0.80 lbs

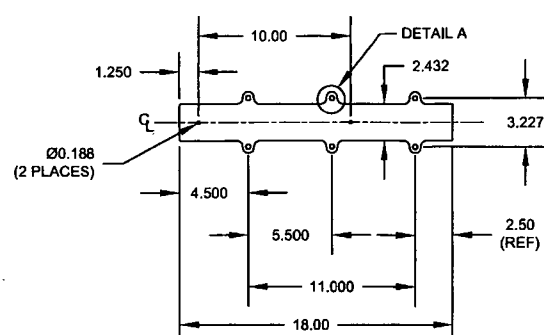
D	UPDATE DRAWING TEMPLATE; CHANGE ALL (TYP X PLS) TO (X PLACES); PG1 A8: UPDATE NOTES; PG1 A8, PG3 B5,C5: ADD D3564-15; PG1 B6,B3: D3564-1/-3 WAS ONE FIGURE; PG2 A7,A3: D3564-9/-11 WAS ONE FIGURE; PG2 A7,A3: D3564-9/-11 WAS ON PG1; PG3 B6,C8: D3564-13 WAS ON PG2; PG3 D2: WELDING DETAIL WAS ON PG1 PG3 A5,7,B2: RELOCATE DETAILS AND SECTION; PG3 A5,7,B2: INCREASE DETAIL AND SECTION SIZE	CB	07.08.21
C	MOVE TAB OUTBOARD, DETAIL A	PH	07.04.17
B	ADD AMS 5513 AND AMS 5524	PH	07.03.20
A	NEW ISSUE	PH	06.12.18
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	CB		
CHECKED	PH		
MFG. APPR.	PH		
APPROVED	PH		
DE APPR.	PH	WEARSHOE	
DATE	07.08.21	COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



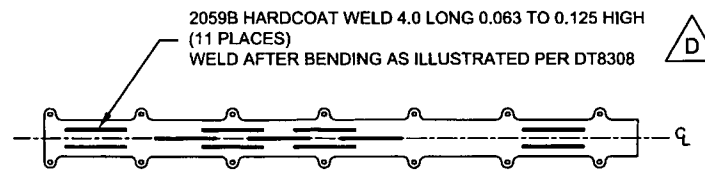
8 7 6 5 4 3 2 1



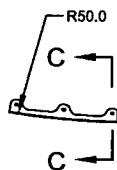
**D3564-13F FLAT PATTERN**



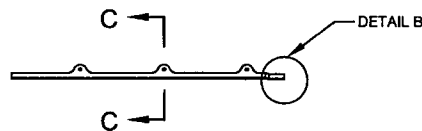
**D3564-15F FLAT PATTERN**



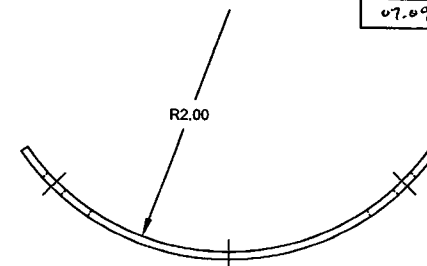
**DETAIL D**  
(D3564-1/-3/-9/-11 WELDING DETAIL)



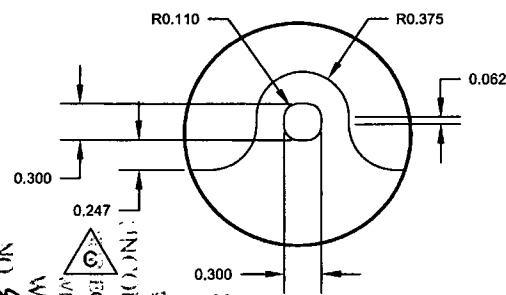
**D3564-13 BENDING DETAIL**  
(MAKE D3564-13 FROM D3564-13F)



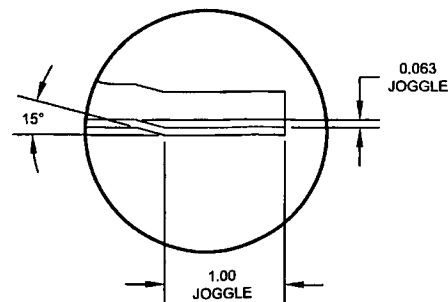
**D3564-15 BENDING DETAIL**  
(MAKE D3564-15 FROM D3564-15F)



**SECTION C-C**  
SCALE 1:1



**DETAIL A**  
SCALE 1:1



**DETAIL B**  
SCALE 1:1

**RELEASED**

07.09.04

DESIGN	PH	<b>DART AEROSPACE LTD</b>	
DRAWN	CB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO.	REV. D
MFG. APPR.	PH	D3564	SHEET 3 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE	1:
DATE	07.08.21	COPYRIGHT © 2005 BY DART AEROSPACE LTD	
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NO. 10554  
WORK ORDER  
WITHOUT NOTICE  
COPY  
ENGINEERING  
RETURN TO  
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SCALE 1:1